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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/543,171

07/22/2005

Jean-Pierre Renaudin

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EXAMINER

HYEON, HAE M

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/543,171

Applicant(s)

RENAUDIN ET AL.

Examiner

Hae M. Hyeon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the present drawings do not seem to be a formal drawing. Also, some of the cross-hatching lines in the cross-sectional views use wrong cross-hatching lines for the represented materials such as metal, wood, or plastic and etc.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: “**insulating plate S**” recited on page 9, lines 24-25. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “52” has been used to designate both **free end and connection pad** (see page 9, lines 13 and 18). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. **Figure 1** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted

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by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Page 5, lines 36-38 of the present specification explains that Figure 1 shows schematically a fiberizing installation 10, **which is conventionally comprises**.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 23-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 23 recites, “An electrical supply system comprising: at least one electrical connector terminal.” It seems that the electrical connector terminal in claim 23 is one of the terminals 6-8 of the fiberizing installation 10. The examiner understood that the electrical supply system is the busbar 9 and the connection device 3 is electrically connected between the electrical connector terminal 6-8 of the fiberizing installation 10 and the busbar 9 such that the power can be deliver to the fiberizing installation 10. Thus, if at least one electrical connector terminal of claim 23 is the terminal of the fiberizing installation 10, it is not clear how the at least one electrical connector terminal of the fiberizing installation can be a part of the electrical supply system when the fiberizing installation and the electrical supply system are two different devices.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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8. Claims 16-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 16 recites that the electrical connection piece has **no protection sheath**, but claim 20 recites that **the oxidation-resistant coating** is covering the connection piece. In view of claim 16, the limitation of claim 20 contradicts the limitation of claim 16 because claim 16 requires no protection sheath, but the oxidation-resistant coating of claim 20 is a protection sheath.
- Claim 28, line 3 recites, “a fastening bolt,” but line 4 recites, “the fastener.” Is the fastener in line 4 the fastening bolt in line 3?

9. Claims 23-26 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: **the jaw clamp, the free opposite end of the connection piece, an adjustable mutually cooperating fastener, projecting elements and slots.**

- Claim 23 recites that the connection terminal has a connection portion that cooperates with the connection piece. It is not clear whether the connection portion is cooperating with the connection piece itself, the connection jaw clamp or the free opposite end of the connection piece since the connection jaw clamp is connected to the first end of the connection piece and the connection piece has the free end at the opposite end.
- Claim 24 recites that the connection device is fastened to the busbar by a mutually cooperating fastener. First, it is not clear what made of a mutually cooperating fastener.

Second, it is not clear what part of the connection device is fastened to the busbar. Is claim 24 assuming that the free end of the connection piece attached to the contact surface of the busbar as recited in claim 23 being fastened together by the mutually cooperating fastener? However, claims 23 and 24 do not recite any structural relationship between the free end and the mutually cooperating fastener to identify that the mutually cooperating fastener is fastening the free end.

- Claim 25 is reciting that the mutually cooperating fastener includes projection elements and slots. However, it is not clear where the projection elements and the slots located or comes from because claim 25 do not recite any structural relationship with the preceding claims 16, 23 and 24.
- Claim 26 recites that the mutually cooperating fastener is configured to adjust a position of the connection of the free end to the busbar. It is not clear how the position of the free end connected to the busbar can be adjusted without knowing the structure of the mutually cooperating fastener, the free end, and the busbar.

In view of the drawings and the present specification, it is understood that the busbar has projecting elements for adjustably engaging with slots formed on a connection pad attached to the free end of the connection piece. However, claims 16 and 23-26 do not all the necessary structural element and relationship such as the connection pad with slots attached at the free end of the connection piece to clearly understand the claim limitations recited in claims 23-26.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 16, 17, 19, 21-25 and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Jensen (3,969,098).

Jensen discloses an electrical connection device comprising a connection jaw clamp 454 and a flexible electrical connection piece 435 having a stack of strips on top of one another forming a flexible body, wherein the jaw clamp 454 is connected to a first end of the connection piece 435 and a free opposite end formed by a rigid connection pad 437. The connection piece 435 is connected to at least one electrical connection terminal by nut and bolt 457, 458 of an electrical supply system and the free end 437 is connected to a current busbar 448 by nut and bolt 438 (see Fig. 4). Jensen also discloses a bushing 410 electrically connected to the busbar 448 by the connection device to receive electrical supply to heat the bushing 410.

12. Claims 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kreinberg (US 4,973,370).

Kreinberg discloses an electrical connection device 10 comprising a connection jaw clamp 20 and an electrical connection piece with no protective sheath and a braid flexible body 12 having a first end connected with the jaw clamp 20 and a free opposite end. Figure 4 shows that an oxidation-resistant coating 50 covering the connection piece.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen in view of Williams (US 2,709,795).

Claim 26 recites that the mutually cooperating fastener is adjusting a position of the connection of the free end of the electrical connection piece to the busbar whatever a position of the connection terminal.

While Jensen does not disclose adjusting mutually cooperating fastener, Williams discloses an electrical connection pieces 20 and 21 comprising an elongated slot 29' engaging with a post 24 such that the position of the post 24 can be adjusted relative to the slot 29'.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the electrical connection piece taught by Jensen such that it would have an elongated slot as taught by Williams because the elongated slot allows the positions of the connection pieces to be adjustable.

15. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen in view of Duke et al (US 5,011,421).

Claim 28 recites that the connection jaw clamp has a groove for receiving the connection portion of a connection terminal. Furthermore, the connection portion has an opening and the connection jaw clamp has opening with a shape configured to adjust a position of the fastener.

While Jensen discloses the jaw clamp 454 connected with the connection terminal by nut and bolt 457, 458, but Jensen does not disclose a groove if the jaw clamp or an opening having a shape to adjust a position of the fastener. However, Duke discloses a plane change connector assembly 1 comprising a jaw clamp 3, 23 having a groove for receiving a mating connection piece. Both jaw clamp 3, 23 and the connection piece has openings for receiving nut and bolt fasteners. Figure 1 shows the jaw clamps 3, 23 having elongated openings 15 and 31, respectively. Figure 2 shows a plurality of the plane change connector assembly being connected to a busbar 40. Although Duke does not explain about adjusting a position of the fastener, the elongated openings 15 and 31 will allow the adjustment of the position of the fasteners.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the connection jaw clamp taught by Jensen such that it would have a groove and an opening with a shape to adjust a position of a fastener as taught by Duke because it only deals with different method of fastening two objects.

Conclusion

16. **It is unnecessary, however, that inventions of references be physically combinable to render obvious an applicant's invention.** *In re Sneed*, 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983). The test for obviousness is not whether the features of a reference may be bodily incorporated into the structure of another reference but what the combined teachings of those references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871,881 (CCPA 1981).

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17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 3,404,369 by Grove, US Patent No. 4,003,730 by Brady et al., US Patent No. 4,394,533 by Naito, US Patent No. 4,467,161 by Fox et al., US Patent No. 4,922,068 by Bangs, US Patent No. Des. 400,169 by Endo and US Patent Application Publication No. 2006/0057905 A1 by McGill et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M. Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hae M Hyeon
Primary Examiner
Art Unit 2839

hnh

hnh

Hae Moon Hyeon